



Pesticide Program Updates

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State FIFRA Research & Evaluation Group (SFIREG)

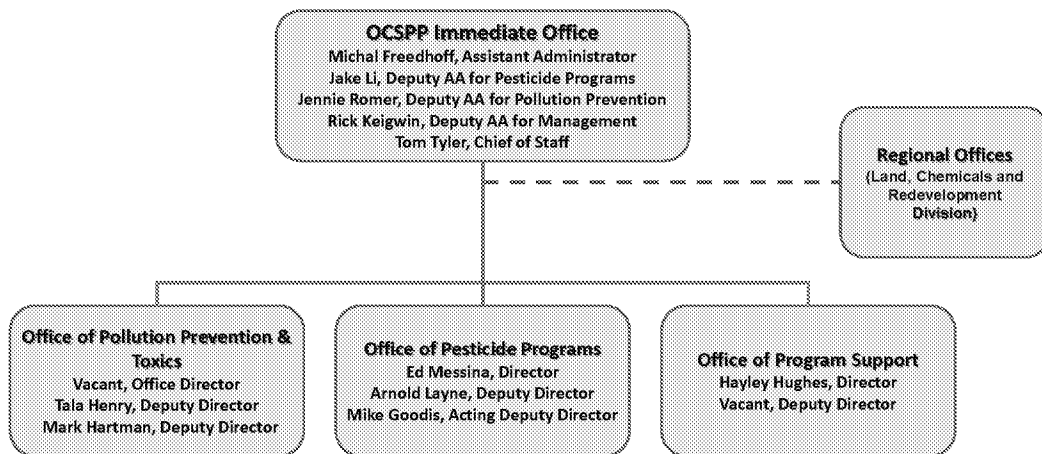
December 6, 2021

Office of Pesticide Programs

U.S. Environmental Protection Agency



OCSPP Overview: Organization Structure





Office of Pesticide Programs

Edward Messina, Director
Arnold Layne, Deputy Director, Management
Michael Goodis, (Acting) Deputy Director, Programs

Endocrine Disruptor
Screening Program

Antimicrobials Division

Anita Pease, Director
Steven Weiss, Deputy Dir.
Lisa Christ, Associate Director

Biopesticides and Pollution Prevention Division

Charles "Billy" Smith, (Acting) Director
Anne Overstreet, Deputy Dir.

Registration Division

Marietta Echeverria, (Acting) Director
Daniel Rosenblatt, Deputy Dir.
Catherine Aubee, Assoc. Dir.

Pesticide Re-evaluation Division

Elissa Reaves, Director
Tim Kleiy, (Acting) Deputy Dir.

Health Effects Division

Dana Vogel, Director
Donald Wilbur, Deputy Dir.
Greg Akerman, Associate Dir.

Environmental Fate and Effects Division

Jan Matuszko, (Acting) Director
Rose Kyprianou, (Acting) Deputy Dir.
Brian Anderson, Assoc. Dir.

Biological and Economic Analysis Division

Kimberly Nesci, Director
Neil Anderson, Deputy Dir.

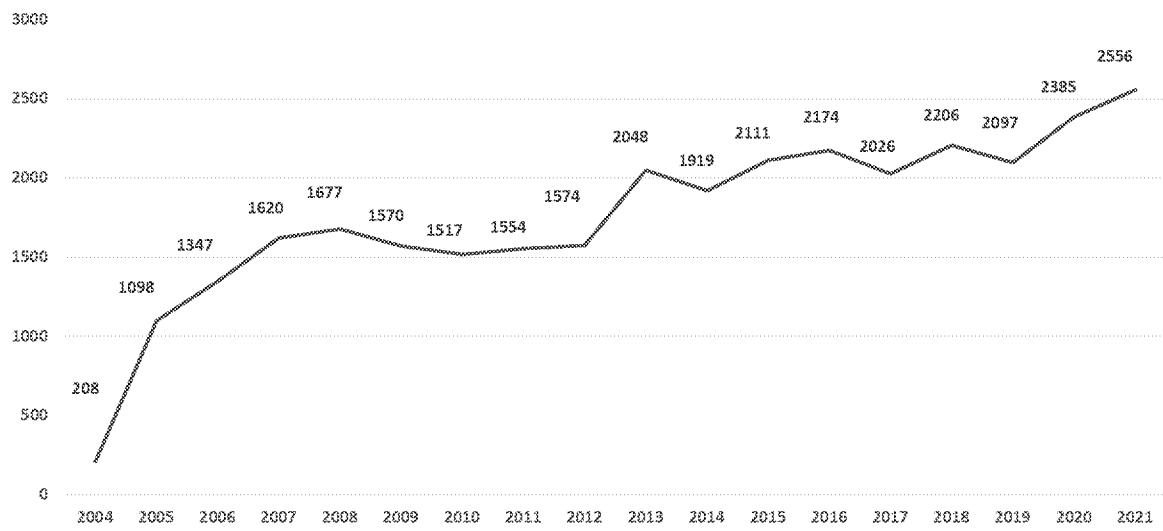
OPP Org.
Structure



OPP FY21 Registration Highlights

- Over **11,000** submissions via Portal
- Over **5,000** registration actions completed
- **2,556** PRIA applications completed
- Registered **14** new active ingredients
- Over **2,800** non-PRIA actions completed
- **60** Section 18 emergency exemption decisions (Asian citrus psyllid, foot and mouth disease, weedy rice, glyphosate-resistant palmer amaranth, coffee leaf rust, brown marmorated stink bug, and hemlock woolly adelgid)
- Responded to over **100** congressional inquiries.
- Responded to high volume of COVID-19 related inquiries congressional (**58**), ombudsman (**1,600**), devices (**700**), disinfectants list (**487**), efficacy (**251**), pre-application meetings (**48**).

PRIA Completions: FY2004 - FY2021



FY21 Registration Highlights

- EPA registered several new pesticides including conventional, biochemical, microbial pesticides, and antimicrobial, including:
 - **Fluindapyr** - new broad-spectrum fungicide active ingredient for foliar agricultural and non-agricultural uses
 - **Picarbutrazox** - a new active ingredient tool for managing resistant fungi
 - **1-ACC** - a new biochemical plant growth regulator active ingredient for regulation of fruit thinning and enhanced bloom on apples and stone fruit
 - **Purpureocillium lilacinum strain PL11** - three products containing the new microbial active ingredient to control plant-parasitic nematodes on food and non-food crops
 - **Sodium benzoate** - a new antimicrobial for use as an in-container materials preservative for controlling microorganisms that cause spoilage and/or fouling in industrial and household products
- Check OPP's [Pesticide News Stories](#) for announcements about these and other new active ingredients.

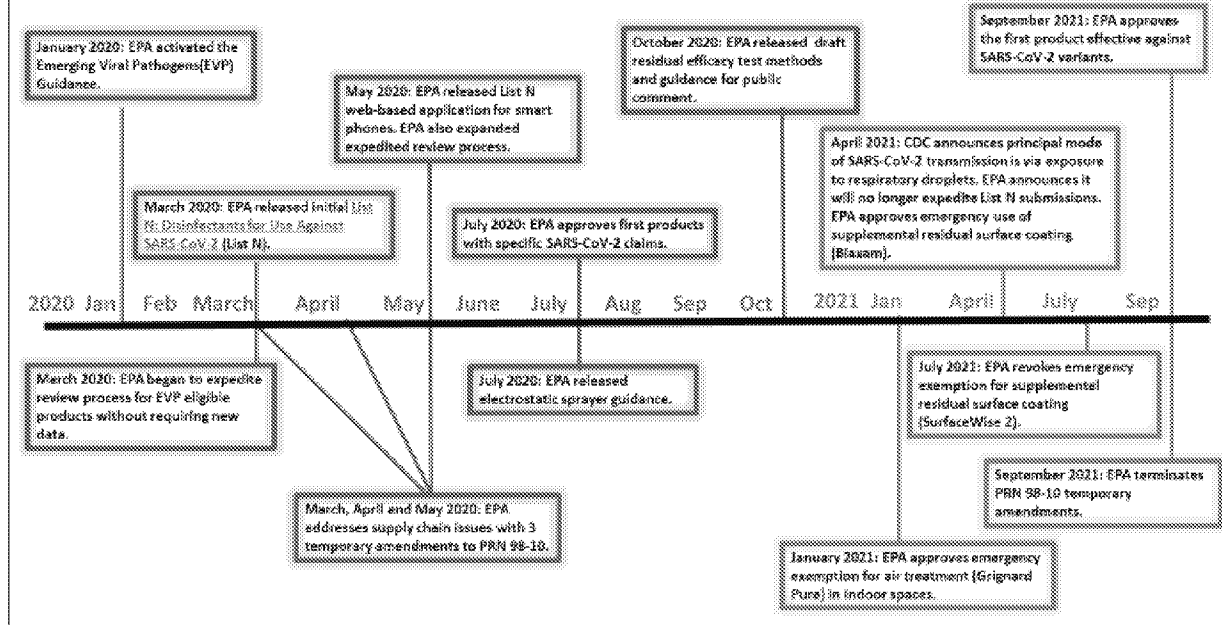
A primary way OPP safeguards human health and the environment while providing pesticide users with effective tools to meet their pest management needs is through the registration of new active ingredients and use expansions of existing active ingredients to new use sites. These new AIs and new uses often pose lower risks to workers and wildlife than existing chemicals on the market while providing additional pest management tools for growers and users to address issues of resistance management.



COVID-19

- Completed over 400 expedited actions, in response to COVID-19
 - added 204 products to List N that have SARS-CoV-2 claims (580 total)
- Completed laboratory efficacy testing of many List N products and other chemistries against human coronavirus strain 229E and SARS-CoV-2
- Registered Copper Surfaces for residual long-term effectiveness against SARS-CoV-2 on a wide range of surfaces, including doorknobs and handrails
- Issued emergency exemptions to 6 states for Grignard Pure indoor air treatment and 3 states for BIAXAM use on airlines
- Approved the first alpha and beta variant claims
- Hosted a webinar on best practices for disinfecting schools & day cares

COVID-19 RESPONSE EFFORT TIMELINE

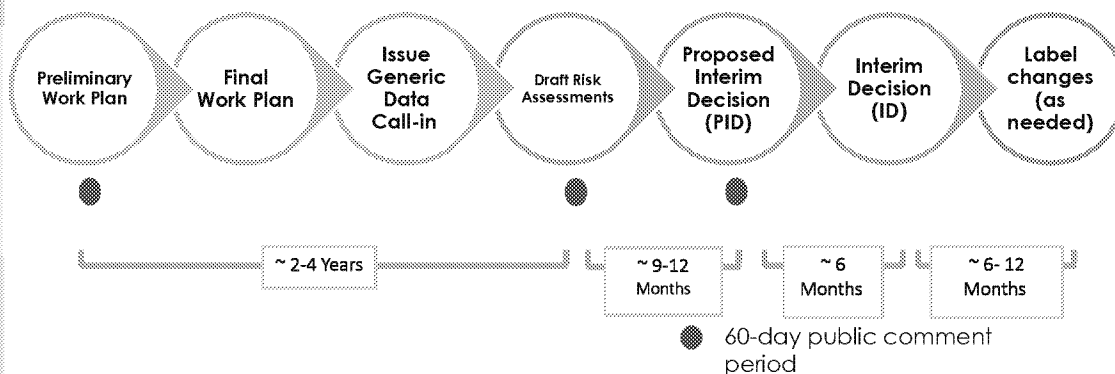


Registration Review Highlights

- 682 draft risk assessments completed (~94% complete!)
- 610 proposed interim decisions complete (~84% complete!)
- 555 final or interim decisions complete (~76% complete!)
- Reviewed ~700 Registration Review labels and approved ~320 labels in FY2021!
- Released the registration review schedule for the next four years through fiscal year 2025



Registration Review Process

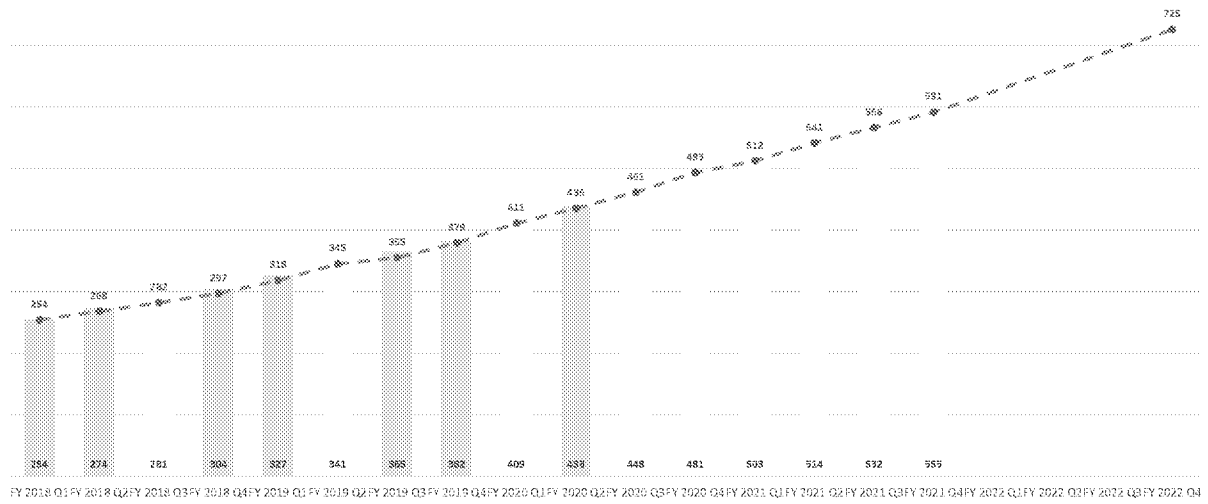


U.S. Environmental Protection Agency

Number of FIFRA Decisions Completed Through Pesticides Registration Review

1.4.4

Preferred Direction: Higher Than Target



EPA Registration Review Risk Reduction

■ **Reduced Bystander Exposure**

- Restricted application methods, application sites, aeration specifications and/or required a buffer or mandatory spray drift language to protect bystanders near application areas.

■ **Improved Worker Protection**

- Mitigation such as adding or modifying personal protective equipment, reduced application rates, and/or eliminating uses.
- Reducing application rates, adding application restrictions, negotiating use deletions or increasing restricted entry intervals (REIs) to address post-application risks to workers.

Registration Review Risk Reduction

▪ **Reducing Ecological Risk of Pesticides**

- Reduce spray drift by either requiring minimum droplet size or adding advisory language
- Reduce the risk of plants developing resistance to herbicides
- Reduce potential risk to non-target organisms by establishing a maximum annual application rate
- Reduce risk to non-target organisms by negotiating use deletions

▪ **Reducing Dietary Risks**

- To reduce potential dietary exposure to formetanate, particularly for areas which rely on drinking water by means of private wells, EPA limited application only to areas with a soil pH above 6.5 where formetanate can readily degrade.

Registration Review Updates

Glyphosate

- ✧ In early February 2020, EPA issued the Glyphosate Interim Decision, which included mitigation and label changes to target pesticide sprays on intended pests, protect pollinators, and reduce the problem of weeds becoming resistant to glyphosate.
- ✧ On November 12, 2021, EPA released the final BE for glyphosate and initiated consultation with the U.S. Fish and Wildlife Service and the National Marine Fisheries Service.

Paraquat

- ✧ In August 2021, released the interim decision for paraquat, finalizing new, stronger safety measures to reduce exposure.
- ✧ The ID includes the following enforceable mitigation measures:
 - ✧ Limiting aerial applications and requiring residential buffers
 - ✧ Prohibiting pressurized handgun and backpack sprayer applications
 - ✧ Requiring enclosed cabs or respirators for groundboom applications
 - ✧ Increasing the Restricted Entry Interval (REI) for several crops



Registration Review Updates

Carbaryl

- * On June 8, 2021, EPA released a revised draft human health risk assessment and a draft ecological risk assessment for carbaryl, a N-methyl carbamate insecticide used to control pests in terrestrial agricultural use sites.
- * Specific findings in the revised draft human health risk assessment include residential, occupational handler, and aggregate risks of concern. EPA found no dietary risks of concern.

Sulfuryl Fluoride

- * In May 2021, EPA published the Sulfuryl Fluoride Draft Interim Re-entry Mitigation Measures Memorandum in response to an Office of Inspector General audit and extensive analytical testing in OPP's Ft. Meade chemistry laboratory.
- * This early mitigation was proposed to address potential re-entry risks from the use of SF in residential fumigation in advance of the regular Registration Review schedule.
- * The comment period for this early mitigation and the risk assessments closed on September 23, 2021.



Registration Review Updates

Neonicotinoids

- In February 2020, EPA published the Proposed Interim Decisions for the neonicotinoids; **acetamiprid, clothianidin, dinotefuran, imidacloprid, and thiamethoxam** with proposed new measures to reduce potential ecological risks, particularly to pollinators.
- After reviewing public input, the agency anticipates issuing Interim Decisions in 2022.
- In August 2021, EPA released its draft biological evaluations (BEs) for clothianidin, imidacloprid and thiamethoxam.
- The draft BEs found that each chemical is likely to adversely affect at least one individual of certain listed species under the Endangered Species Act or their designated critical habitats.



Registration Review Updates

Rodenticides

- * The draft risk assessments for the rodenticides were completed in 2020.
- * The comment period closed and comments are being considered in drafting the Proposed Interim Decisions, which EPA plans to issue in 2022.
- * The Interim Decisions for the rodenticides are also scheduled for 2022.

Pyrethroids

- * Throughout 2020 and 2021, EPA published numerous proposed interim decisions as well as some interim decisions for the pyrethroids.
- * EPA plans to publish the remaining pyrethroid interim decisions in 2022.

Registration Review Updates

Pyridine Herbicides

- ※ Released interim decisions for aminopyralid and picloram, finalizing stronger measures to help prevent residues from contaminating compost and damaging non-target plants in sites where compost is applied.
- ※ Aminopyralid and picloram are pyridine herbicides used in both agricultural and non-agricultural settings:
 - ※ Agricultural use sites include pastures and rangeland
 - ※ Non-agricultural use sites include turf, industrial areas, rights of ways, roadsides and other non-agricultural sites
- ※ Aminopyralid and picloram are used to control of a wide range of broadleaf and woody weed species in pasture and rangeland, particularly invasive species and help preserve conservation land due to their ability to target hard to control weeds without damaging native vegetation.
- ※ Pyridine herbicides have a history of reported compost incidents. Residues in contaminated compost can persist and damage non-target plants in residential gardens and other sites.
- ※ For many years, EPA has been engaging with stakeholders to identify effective measures to prevent damage to non-target plants where compost is applied



Registration Review Updates

Pyridine Herbicides

- * EPA is now requiring the following mitigation measures to reduce the potential for residues of these herbicides in compost:
 - * Prohibition of off-site use of treated plant materials and manure from grazing animals for compost and animal bedding/feed until 18 months after application to allow for residues to decline;
 - * Requiring that livestock be grazed on forage that haven't been treated for three days before moving to a site where manure is collected, or sensitive crops are grown;
 - * Requiring pasture applicators to notify the property owners/operators of the compost prohibition, and for the applicator to keep a record of this notification for two years;
 - * Updating compost pictogram on pesticide labels showing growers/operators how to manage treated materials; and,
 - * Requiring registrants to participate in a stewardship program and provide educational outreach for applicators, growers, land managers/operators, and others affected by herbicide residues in compost.
- * EPA will also continue to work with stakeholders to develop additional educational resources for land managers and others affected by herbicide residues in compost.

EPA Registration Review

Chlorpyrifos

- ⌘ In August 2021, issued the final rule revoking all “tolerances” for chlorpyrifos, which establish an amount of a pesticide that is allowed on food.
- ⌘ EPA intends to issue a Notice of Intent to Cancel under FIFRA to cancel registered food uses of chlorpyrifos associated with the revoked tolerances.
- ⌘ The tolerances for chlorpyrifos will be revoked on February 28, 2022, six months after the final rule published on August 30, 2021, in the Federal Register.
- ⌘ The rule was issued in response to the Ninth Circuit’s order directing EPA to issue a final rule in response to the 2007 petition filed by Pesticide Action Network North America and the Natural Resources Defense Council.
- ⌘ After considering public comments, the Agency will proceed with registration review for the remaining non-food uses of chlorpyrifos by issuing the interim decision by the end of 2022, which may consider additional measures to reduce human health and ecological risks.

EPA FY21 Registration Highlights

Dicamba

- * On September 9, 2021, EPA sent letters to registrants of products containing dicamba for post-emergent uses, reiterating their legally required duty under FIFRA section 6(a)(2):
 - * *if at any time after the registration of a pesticide the registrant has additional factual information regarding unreasonable adverse effects of the pesticide, the registrant shall submit such information to EPA.*
- * Currently, EPA is working with growers, state agencies and other experts to evaluate the effectiveness of the current requirements.
 - EPA held a dicamba listening session on Aug. 30, 2021, with the Weed Science Society of America, various academics, state agriculture extension agents, and the U.S. Department of Agriculture.
 - On Sep. 2, 2021, the Agency held another listening session with the Association of American Pesticide Control Officials.

Dicamba

Since it was first registered for use in cotton and soybean product, EPA has received extensive reports of crop injury presumed to be caused by off-target movement from the use of dicamba.

EPA is extremely concerned about these reports and has taken steps to better understand the nature and severity of these incidents in order to assess the sufficiency of the mitigations in the 2020 decision. In October 2020, following the Ninth Circuit Court's vacatur and comprehensive review of data submitted by registrants, academics and states, EPA issued registrations of three dicamba products approved for over-the-top use on dicamba-tolerant cotton and soybeans to combat hard to control herbicide-resistant weeds.

Subsequently, multiple petitioners brought litigation against the Agency, some aiming to expand and others to reduce the over-the-top use of dicamba on DT crops.

Several states submitted Special Local Need FIFRA 24(c) registrations to extend OTT use later in the growing seasons.



ESA Biological Evaluations and Consultation Initiation

- ◆ EPA completed multiple draft or final Biological Evaluations, leading to listed species determinations for some of the most widely used insecticides and herbicides in the United States. These actions include:
 - Releasing final Biological Evaluations on **methomyl and carbaryl**, which were the first BEs to use the revised method.
 - Releasing draft Biological Evaluations for **atrazine, simazine, propazine, and glyphosate**.
 - Releasing draft Biological Evaluations on **imidacloprid, thiamethoxam, and clothianidin**.

EPA Certification of Pesticide Applicators Rule

- EPA regional teams are coordinating with PRD on finalizing agency review of submitted certification plans.
- We completed review of 35 of 63 state, territory, and tribal certification plans
- Prior to October 1, 2021, we were unable to take action on revising the certification rule because of a prohibition of such actions imposed by the Pesticide Registration Improvement Act of 2018 (PRIA 4)
- We developed a rule that would extend the date by which plans must be approved and ensure existing plans can remain in place during this time-limited extension. The rule is currently with OMB, and we aim to have it published by January 2022.

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I know everyone has seen the OPP update that came out at end of October.

Unfortunately, I only have limited info to share at this time b/c the rule is still draft and in development.

I can share that the rule is currently with OMB for interagency review

We are working feverishly to ensure publication before 1/3/22 so that that FIFRA effective date period doesn't reach beyond the current March 4 deadline.

EPA acknowledges the challenges certification program administrators face to bring the existing plans into compliance within the timeframes specified in the 2017 rule - particularly the timeline.

The concerns about timeline something that came through loud and clear to EPA -

Due to the impact of the COVID-19 public health emergency and the need for careful review of program-specific issues and questions, EPA is in the process of developing a rule that would extend the date by which plans must be approved and ensure existing plans can remain in place during this time-limited extension.

As a reminder, EPA was unable to take any action in terms of rule revisions because of the prohibition in PRIA4 to make changes to the Certification rule before October 2021.

Further, litigation over attempted delays to the effective date of the January 4, 2017 final rule led some certifying authorities to postpone work on revising their certification plans.

This anticipated extension is going to allow for due diligence by EPA and states to finalize improved certification plans and facilitation of the implementation of these plans.

First and foremost it will allow RUP applicators to continue to obtain the training and certifications they need to use RUPs under the existing certification plans.

Gives the time needed for thorough consideration and deliberation over thoughtful comments and questions that have been coming into the Regions.



Agricultural Worker Protection Standard Application Exclusion Zone Rule Update

- Until further notice from EPA, the 2015 WPS remains in effect with no changes to the AEZ provisions
 - Final Rule published October 30, 2020
 - December 2020 - Lawsuits filed challenging AEZ Final Rule; proceedings stayed by the court
 - Preliminary injunction has stayed the effective date
 - EPA enjoined from implementing the provisions
 - Preliminary injunction in effect until December 20, 2021
 - Ongoing litigation could extend injunction

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On October 30, 2020, EPA finalized updates to the AEZ provisions under the WPS.

The 2020 Rule, originally set to go into effect on December 29, 2020, made modifications to the 2015 WPS/AEZ requirements. In December 2020, two petitions were filed in the U.S. District Court for the Southern District of New York and in the U.S. Second Circuit Court of Appeals challenging the 2020 Rule (now consolidated as case number 20 Civ. 10642).

At this time, there is no implementation of the 2020 Rule as a preliminary injunction has stayed the effective date of the 2020 Rule and enjoined EPA from implementing the 2020 revisions.

Therefore, until further notice, the 2015 WPS remains in effect with no changes to the AEZ provisions.

This preliminary injunction is in effect until December 20, 2021, but could be extended as the litigation is ongoing.

The 2020 Rule is concurrently undergoing review per the Executive Order on Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis.



PFAS and Pesticide Containers

- ✧ In September 2020, EPA became aware of PFAS contamination of a mosquito control product used in Massachusetts.
- ✧ In December 2020, EPA studied the fluorinated high-density polyethylene containers used to store and transport the product and determined the fluorination process used may be the source of the contamination.
- ✧ In March 2021, EPA became aware of a second mosquito product, used in Maryland, that may be contaminated with PFAS and released testing data showing PFAS contamination in the containers was extremely small.
- ✧ In September 2021, EPA released an internally validated method for the detection of 28 PFAS compounds in oily matrices, such as pesticide products formulated in oil, petroleum distillates, or mineral oils.
- ✧ The new method is intended to help pesticide manufacturers, state regulators, and other stakeholders test oily matrix products for PFAS.

PFAS and Pesticide Containers

Ongoing Outreach Activities

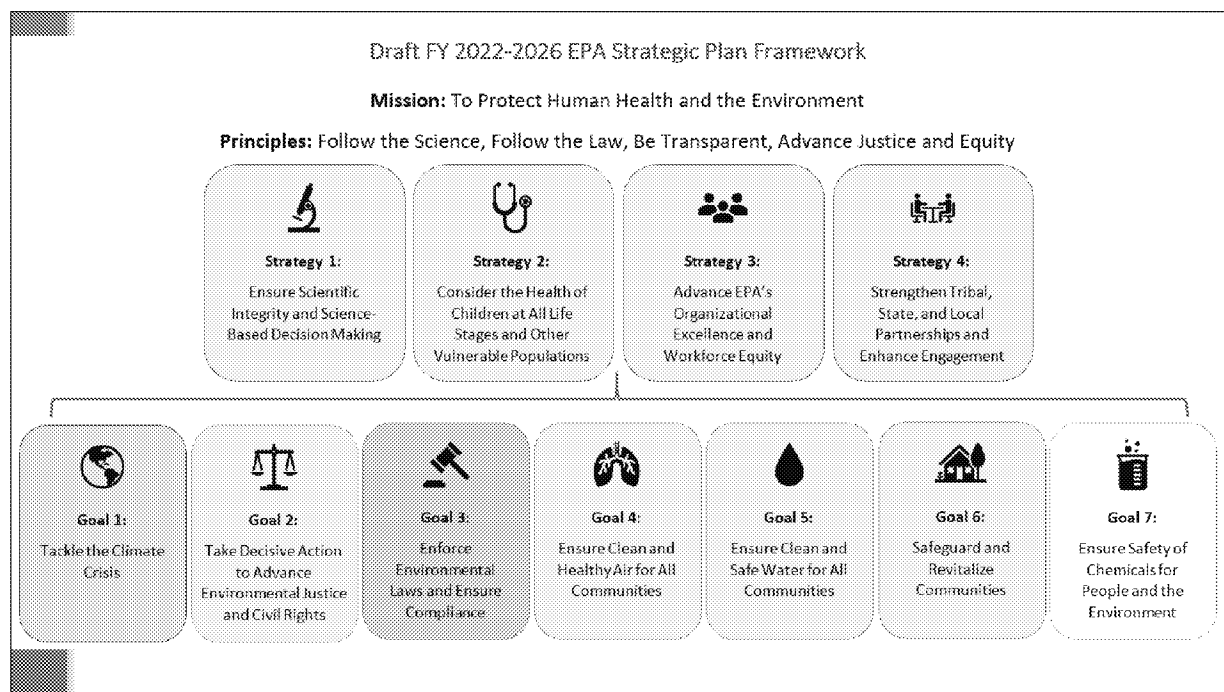
- ✧ Meeting with Association of American Pest Control Officials (AAPCO)
- ✧ Participation in State FIFRA Information (SFIREG) meetings
- ✧ Ongoing calls with states and EPA Regions, including state departments of agriculture and the environment
- ✧ Ongoing collaboration between the Analytical Chemistry Branch and state Laboratories
- ✧ Calls with Federal partners (USDA, FDA)
- ✧ Calls with PEER to discuss their laboratory results
- ✧ Calls with pesticide industry (Crop Life America/RISE; Ag Container Recycling Council) and registrants to answer product-specific questions, address packaging changes or other necessary changes, etc...
- ✧ Calls with the container industry (Inhance, Barrier Plastics Inc.)



Supply Chain Relief

Additional registration actions:

- Alleviated supply-chain issue by allowing registrants of non-antimicrobial pesticides to substitute some combination of pre-approved alternate inert ingredients for inert ingredients derived from propylene oxide (PO) feedstocks
 - in limited supply due to weather events that occurred in the U.S. Gulf Coast in February 2021.
- This action is time limited, extending to December 31, 2021.
- Any registrants who wish to make the substitution permanent should use the standard amendment process outlined in PRN 98-10.



First time Climate Change is a stand-alone strategic goal

Unprecedented Environmental Justice/Civil Rights goal

Agency Core Principle: Advance Justice and Equity

Four Cross-Agency Strategies, the bedrock of how we work to accomplish strategic goals:

Ensure Scientific Integrity and Science-Based Decision Making; Consider the Health of Children at All Life Stages and Other Vulnerable Populations; Advance EPA's Organizational Excellence and Workforce Equity; Strengthen Tribal, State, and Local Partnerships and Enhance Engagement

Seven Tribal Long-term Performance Goals; other LTPGs focus on meeting needs of underserved populations

Increased emphasis on enforcing environmental laws, especially in overburdened communities



Strategic Goal: Ensure Chemical and Pesticide Safety

Protect the health of families, communities, and ecosystems from the risk posed by chemicals and pesticides:

- ✦ Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended by the Food Quality Protection Act (FQPA) and the Pesticide Registration Improvement Extension Act of 2018 (PRIA)
 - ✦ Protecting people and the environment from the risk that pesticide use can pose
 - ✦ Reviews and registers new pesticides and new uses
 - ✦ Evaluates pesticides that are already in the market
 - ✦ Evaluating pesticides to protect human and ecological health
- ✦ Endangered Species Act (ESA): Considers the effects determinations or protections of federally threatened and endangered species

Long-Term Performance Goals

By September 30, 2026, complete 78 pesticide registration review cases.

By September 30, 2026, consider the effects determinations or protections of federally threatened and endangered species for new active ingredients in 90% of the risk assessments supporting pesticide registration decisions for new active ingredients compared to the FY 2020 baseline of 50%.

By September 30, 2026, consider the effects determinations or protections of federally threatened and endangered species in 50% of the risk assessments supporting pesticide registration review decisions compared to the FY 2020 baseline of 25%.

By September 30, 2026, support Agricultural Worker Protection Standard (WPS) pesticide safety training for 20,000 farmworkers annually compared with the FY 2018-2020 annual average baseline of 11,000.



OPP Priorities

- ✧ Considering the effects determinations or protections of federally threatened and endangered species
- ✧ Ensuring OPP's regulatory actions include special considerations for environmental justice concerns
- ✧ Ensuring OPP's regulatory actions include special considerations for Climate Change concerns
- ✧ Advancing critical science and policy issues
- ✧ Working towards PRIA 5
- ✧ Progressing the registration review program
- ✧ Working collaboratively with state partners and other stakeholders to implement program
- ✧ Continuing Employee Engagement, Process Improvements and IT Improvements

Enhancing Scientific Integrity

- March 2021, OCSPP issued an internal memo that affirmed her commitment to scientific integrity as an essential and critical element to our work.
- October 2021, OCSPP issued an internal memo, indicating next steps in her commitment to strong science in the review of chemicals and pesticides. These steps include:
 - establishing two internal science policy advisory councils
 - creating a new senior-level career position to serve as a science policy advisor in OCSPP
 - making further improvements to policies and procedures



Questions & Answers